

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-14 (Cancelled).

15. (Previously Presented) A process for flaring a dilute gaseous waste stream not capable of self-sustaining combustion, comprising the steps of:

blending the dilute gaseous waste stream not capable of self-sustaining combustion with a first hydrogen-containing gas stream comprising at least about 3 mol % hydrogen and having a net heating value of less than 913 Btu/scf, and a second gas stream comprising hydrocarbons, said blending to produce a flare gas blend having at least 3 mole % H₂ based on the total moles of the flare gas blend, a heating value in a range of 10 Btu/scf to 275 Btu/scf, and a 70 wt % or lower hydrocarbon concentration;

producing a flare feed stream comprising the flare gas blend,

feeding said flare feed stream gas blend to a flare; and

converting at least 80% of said dilute gaseous waste stream to carbon dioxide and water by combusting said flare gas blend feed stream in conjunction with said using the flare.

16. (Currently Amended) A The process according to claim 15, wherein said combusting of the flare gas blend is a self-sustaining combustion.

17. (Currently Amended) ~~A~~ The process according to claim 15, wherein the first hydrogen-containing gas stream comprises hydrogen from ammonia dissociation.

18. (Currently Amended) ~~A~~ The process according to claim 15, wherein the first hydrogen-containing gas stream comprises synthesis gas.

Claim 19 (Cancelled).

20. (New) The process according to claim 15, wherein the hydrogen-containing gas stream comprises at least about 4 mol % hydrogen, based on the total moles in the hydrogen-containing gas stream.

21. (New) The process according to claim 15, wherein the hydrogen-containing gas stream has a net heating value of less than 913 Btu/scf.

22. (New) The process according to claim 15, wherein said blending step involves comprises blending the dilute gaseous waste stream with the hydrogen-containing gas stream and a gaseous hydrocarbon-containing enrichment fuel stream.

23. (New) The process according to claim 15, wherein said converting step achieves conversion of at least 98% of said dilute gaseous waste stream.
